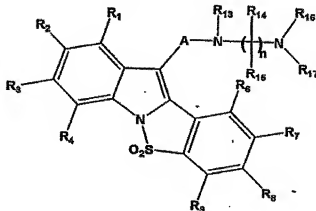


**AMENDMENTS TO CLAIMS**

This listing of claims will replace all prior version and listings of claims in this application:

1. (Currently Amended) A compound of the general Formula (I),



General Formula (I)

wherein A may be either  $-\text{CR}_{11}\text{R}_{12}-$ ,  $-\text{C}=\text{O}$  or  $-\text{SO}_2-$ ;

$\text{R}_1$ ,  $\text{R}_2$ ,  $\text{R}_3$ ,  $\text{R}_4$ ,  $\text{R}_6$ ,  $\text{R}_7$ ,  $\text{R}_8$  and  $\text{R}_9$ ,  $\text{R}_{11}$ ,  $\text{R}_{12}$ ,  $\text{R}_{13}$ ,  $\text{R}_{14}$  and  $\text{R}_{15}$  may be same or different and each independently represent hydrogen, halogen, oxo, thio, perhaloalkyl, perhaloalkoxy, hydroxy, amino, nitro, cyano, formyl, amidino, guanidino, substituted or unsubstituted groups selected from linear or branched  $(\text{C}_1\text{-C}_{12})$ alkyl,  $(\text{C}_2\text{-C}_{12})$ alkenyl,  $(\text{C}_2\text{-C}_{12})$ alkynyl,  $(\text{C}_3\text{-C}_7)$ cycloalkyl,  $(\text{C}_3\text{-C}_7)$ cycloalkenyl, bicycloalkyl, bicycloalkenyl,  $(\text{C}_1\text{-C}_{12})$ alkoxy, cyclo $(\text{C}_3\text{-C}_7)$ alkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heterocyclalkyl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, heterocyclalkyloxy, acyl, acyloxy, acylamino, monoalkylamino, dialkylamino, arylamino, diarylamino, aralkylamino, alkoxycarbonyl, aryloxy carbonyl, aralkoxycarbonyl, heterocyclalkoxycarbonyl, heteroaryloxy carbonyl, hydroxyalkyl, aminoalkyl, monoalkylaminoalkyl, dialkylaminoalkyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxy carbonylamino, aralkoxy carbonylamino, aminocarbonylamino, alkylaminocarbonylamino, dialkylaminocarbonylamino, alkylamidino, alkylguanidino, dialkylguanidino, hydrazino, hydroxylamino, carboxylic acid and its derivatives, sulfonic acids and its derivatives, phosphoric acid and its derivatives; or

the adjacent groups like  $\text{R}_1$  and  $\text{R}_2$  or  $\text{R}_2$  and  $\text{R}_3$  or  $\text{R}_3$  and  $\text{R}_4$  or  $\text{R}_6$  and  $\text{R}_7$  or  $\text{R}_7$  and  $\text{R}_8$  or  $\text{R}_8$  and  $\text{R}_9$  together with carbon atoms to which they are attached may form a five or a six membered ring, optionally containing one or more double bonds and optionally containing one

or more heteroatoms selected from "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and combinations of double bond and heteroatoms; or

optionally R<sub>11</sub> and R<sub>12</sub> together with the carbon atoms to which they are attached may form a three to six membered ring, optionally containing one or more double bonds and optionally containing one or more heteroatoms selected from "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and combinations of double bond and heteroatoms; or optionally either R<sub>11</sub> or R<sub>12</sub> with may form bond with either R<sub>18</sub> or R<sub>17</sub> to form a 5, 6 or 7-membered heterocyclic ring, which may be further substituted with R<sub>14</sub> and R<sub>15</sub>, and may have either one, two or three double bonds;

R<sub>13</sub>, R<sub>16</sub> and R<sub>17</sub> may be same or different and each independently represents Hydrogen, substituted or unsubstituted groups selected from linear or branched (C<sub>1</sub>-C<sub>12</sub>)alkyl, (C<sub>2</sub>-C<sub>12</sub>)alkenyl, (C<sub>2</sub>-C<sub>12</sub>)alkynyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkenyl, bicycloalkyl, bicycloalkenyl, aryl, aralkyl, heteroaryl, heterocyclylalkyl; optionally R<sub>13</sub> along with either R<sub>18</sub> or R<sub>17</sub> and the two nitrogen atoms may form a 5, 6 or 7-membered heterocyclic ring, which may be further substituted with R<sub>14</sub> and R<sub>16</sub>, and may have either one, two or three double bonds; and

"n" is an integer ranging from 1 to 4, wherein the carbon chains which "n" represents may be either linear or branched.

2. (Currently Amended) A compound according to Claim-1 which is selected from:
  - 10-(4-Methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-d- ioxide;
  - 1-Bromo-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;
  - 1-Chloro-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;
  - 2-Bromo-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;
  - 2-Bromo-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide hydrochloride salt;
  - 2-Methoxy-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;
  - 2-Methoxy-12-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-benzo[4,5]pentaleno[1,2-b]naphthalene-5,5-dioxide;
  - 2-Ethoxy-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

2-Ethoxy-8-methyl-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene 5,5-dioxide;

2-Benzyloxy-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

2-Cyclopentyloxy-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

2-Cyclohexyloxy-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

2-(Furan-2-ylmethoxy)-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

1,2,3-Trichloro-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

2,8-Dimethoxy-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

2-Bromo-8-methoxy-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

8-Methoxy-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

8-Methoxy-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide hydrochloride salt;

8-Isopropoxy-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

2-Bromo-8-methyl-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

4-Methyl-10-(4-methylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

(RS) 8-Methyl-10-[1-(4-methylpiperazin-1-yl)ethyl]-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

(RS) 2-Methoxy-10-[1-(4-methylpiperazin-1-yl)ethyl]-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

(RS) 2-Bromo-8-methoxy-10-[1-(4-methylpiperazin-1-yl)ethyl]-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

(RS) 1-[4-(8-Methoxy-5,5-dioxo-5H-6-thia-4b-aza-indeno[2,1-a]inden-10-ylmethyl)-2-methylpiperazin-1-yl]ethanone;

10-(4-Pyridin-2-yl-piperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;  
8-Methoxy-10-(4-pyridin-2-yl-piperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

2-Isopropoxy-10-(4-benzoylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

2-(Furan-2-ylmethoxy)-10-(4-benzoylpiperazin-1-ylmethyl)-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

10-(4-Benzylpiperazin-1-ylmethyl)-8-methyl-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

10-(4-Benzylpiperazin-1-ylmethyl)-8-methoxy-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

2-Methoxy-10-piperazin-1-ylmethyl-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

2-Isopropoxy-10-piperazin-1-ylmethyl-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

2-(Furan-2-ylmethoxy)-10-piperazin-1-ylmethyl-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

10-[1,4]Diazepan-1-ylmethyl-2-methoxy-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

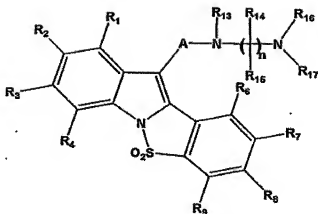
1-[4-(5,5-Dioxo-5H-6-thia-4b-aza-indeno[2,1-a]inden-10-ylmethyl)-[1,4]diazepan-1-yl]phenylmethanone;

10-(4-Ethyl-[1,4]diazepan-1-ylmethyl)-2-methoxy-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide; and

10-(4-Isopropyl-[1,4]diazepan-1-ylmethyl)-2-methoxy-5-thia-4b-aza-indeno[2,1-a]indene-5,5-dioxide;

or a stereoisomer, or a polymorph, or any suitable combination of above, such as a nitrogen oxide thereof; a prodrug of the compound or the nitrogen oxide; a pharmaceutically acceptable salt of the compound, the nitrogen oxide, or the prodrug; or a solvate or hydrate of the compound, the nitrogen oxide, the prodrug or the pharmaceutically acceptable salt.

3. (Currently Amended) A process for the preparation of a compound of general Formula (I),



Formula (I)

wherein A may be either -CR<sub>11</sub>R<sub>12</sub>-, -C=O or -SO<sub>2</sub>-;

R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, R<sub>11</sub>, R<sub>12</sub>, R<sub>13</sub>, R<sub>14</sub> and R<sub>15</sub> may be same or different and each independently represent hydrogen, halogen, oxo, thio, perhaloalkyl, perhaloalkoxy, hydroxy, amino, nitro, cyano, formyl, amidino, guanidino, substituted or unsubstituted groups selected from linear or branched (C<sub>1</sub>-C<sub>12</sub>)alkyl, (C<sub>2</sub>-C<sub>12</sub>)alkenyl, (C<sub>2</sub>-C<sub>12</sub>)alkynyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkenyl, bicycloalkyl, bicycloalkenyl, (C<sub>1</sub>-C<sub>12</sub>)alkoxy, cyclo(C<sub>3</sub>-C<sub>7</sub>)alkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heterocyclalkyl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, heterocyclalkyloxy, acyl, acyloxy, acylamino, monoalkylamino, dialkylamino, arylamino, diarylamino, aralkylamino, alkoxycarbonyl, aryloxy carbonyl, aralkoxycarbonyl, heterocyclalkoxycarbonyl, heteroaryloxy carbonyl, hydroxyalkyl, aminoalkyl, monoalkylaminoalkyl, dialkylaminoalkyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxy carbonylamino, aralkyloxy carbonylamino, aminocarbonylamino, alkylaminocarbonylamino, dialkylaminocarbonylamino, alkylamidino, alkylguanidino, dialkylguanidino, hydrazino, hydroxylamino, carboxylic acid and its derivatives, sulfonic acids and its derivatives, phosphoric acid and its derivatives; or

the adjacent groups like R<sub>1</sub> and R<sub>2</sub> or R<sub>2</sub> and R<sub>3</sub> or R<sub>3</sub> and R<sub>4</sub> or R<sub>5</sub> and R<sub>6</sub> or R<sub>7</sub> and R<sub>8</sub> or R<sub>8</sub> and R<sub>9</sub> together with carbon atoms to which they are attached may form a five or a six membered ring, optionally containing one or more double bonds and optionally containing one or more heteroatoms selected from "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and combinations of double bond and heteroatoms; or

optionally R<sub>11</sub> and R<sub>12</sub> together with the carbon atoms to which they are attached may form a three to six membered ring, optionally containing one or more double bonds and

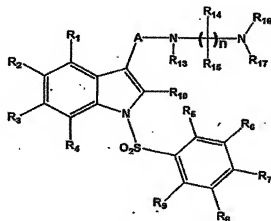
optionally containing one or more heteroatoms selected from "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and combinations of double bond and heteroatoms; or

optionally either R<sub>11</sub> or R<sub>12</sub> with may form bond with either R<sub>16</sub> or R<sub>17</sub> to form a 5, 6 or 7-membered heterocyclic ring, which may be further substituted with R<sub>14</sub> and R<sub>15</sub>, and may have either one, two or three double bonds;

R<sub>13</sub>, R<sub>16</sub> and R<sub>17</sub> may be same or different and each independently represents Hydrogen, substituted or unsubstituted groups selected from linear or branched (C<sub>1</sub>-C<sub>12</sub>)alkyl, (C<sub>2</sub>-C<sub>12</sub>)alkenyl, (C<sub>2</sub>-C<sub>12</sub>)alkynyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkenyl, bicycloalkyl, bicycloalkenyl, aryl, aralkyl, heteroaryl, heterocyclalkyl;

optionally R<sub>13</sub> along with either R<sub>16</sub> or R<sub>17</sub> and the two nitrogen atoms may form a 5, 6 or 7-membered heterocyclic ring, which may be further substituted with R<sub>14</sub> and R<sub>15</sub>, and may have either one, two or three double bonds; and

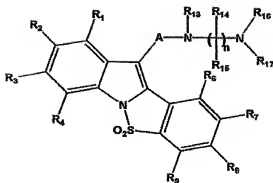
"n" is an integer ranging from 1 to 4, wherein the carbon chains which "n" represents may be either linear or branched; which comprises reacting a compound of formula (II) given below,



Formula (II)

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, R<sub>13</sub>, R<sub>14</sub>, R<sub>15</sub>, R<sub>16</sub>, R<sub>17</sub>, A and n are as defined previously, or precursor thereof, while either R<sub>5</sub> or R<sub>10</sub> is a halogen atom such as bromo, chloro or iodo, and the other is hydrogen; with a Pd(0) or Pd (II) derivative as a catalyst.

4. (Withdrawn) A process for the preparation of a compound of general formula (I),



wherein A may be either  $-CR_{11}R_{12}$ ,  $-C=O$  or  $-SO_2$ ;

$R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$ ,  $R_9$ ,  $R_{11}$ ,  $R_{12}$ ,  $R_{13}$ ,  $R_{14}$  and  $R_{15}$  may be same or different and each independently represent hydrogen, halogen, oxo, thio, perhaloalkyl, perhaloalkoxy, hydroxy, amino, nitro, cyano, formyl, amidino, guanidino, substituted or unsubstituted groups selected from linear or branched  $(C_1-C_{12})$ alkyl,  $(C_2-C_{12})$ alkenyl,  $(C_2-C_{12})$ alkynyl,  $(C_3-C_7)$ cycloalkyl,  $(C_3-C_7)$ cycloalkenyl, bicycloalkyl, bicycloalkenyl,  $(C_1-C_{12})$ alkoxy, cyclo $(C_3-C_7)$ alkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heterocyclylalkyl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, heterocyclylalkyloxy, acyl, acyloxy, acylamino, monoalkylamino, dialkylamino, arylamino, diarylamino, aralkylamino, alkoxycarbonyl, aryloxy carbonyl, aralkoxycarbonyl, heterocyclylalkoxycarbonyl, heteroaryloxy carbonyl, hydroxyalkyl, aminoalkyl, monoalkylaminoalkyl, dialkylaminoalkyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxy carbonylamino, aralkoxy carbonylamino, aminocarbonylamino, alkylaminocarbonylamino, dialkylaminocarbonylamino, alkylamidino, alkylguanidino, dialkylguanidino, hydrazino, hydroxylamino, carboxylic acid and its derivatives, sulfonic acids and its derivatives, phosphoric acid and its derivatives; or

optionally  $R_{11}$  and  $R_{12}$  together with the carbon atoms to which they are attached may form a three to six membered ring, optionally containing one or more double bonds and optionally containing one or more heteroatoms selected from "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and combinations of double bond and heteroatoms; or

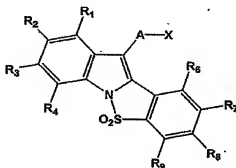
optionally either  $R_{11}$  or  $R_{12}$  may form bond with either  $R_{16}$  or  $R_{17}$  to form a 5, 6 or 7-membered heterocyclic ring, which may be further substituted with  $R_{14}$  and  $R_{15}$ , and may have either one, two or three double bonds;

$R_{13}$ ,  $R_{16}$  and  $R_{17}$  may be same or different and each independently represents Hydrogen, substituted or unsubstituted groups selected from linear or branched  $(C_1-C_{12})$ alkyl,  $(C_2-$

C<sub>12</sub>)alkenyl, (C<sub>2</sub>-C<sub>12</sub>)alkynyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkenyl, bicycloalkyl, bicycloalkenyl, aryl, alkaryl, heteroaryl, heterocyclylalkyl;

optionally R<sub>13</sub> along with either R<sub>16</sub> or R<sub>17</sub> and the two nitrogen atoms may form a 5, 6 or 7-membered heterocyclic ring, which may be further substituted with R<sub>14</sub> and R<sub>15</sub>, and may have either one, two or three double bonds; and

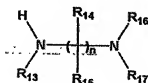
"n" is an integer ranging from 1 to 4, wherein the carbon chains which "n" represents may be either linear or branched; which comprises reacting a which comprises reacting a compound of formula (III) given below,



(III)

wherein all the symbols are as defined earlier with a compound of formula wherein A, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>7</sub>, R<sub>8</sub> and R<sub>9</sub> are as defined in relation to formula (I); X is a hydrogen, or a leaving group such as hydroxy, mesyl, tosyl or halogeno, for example a chloro, bromo or iodo and the like;

with a compound of formula (IV) or its acid addition salt,



(IV)

(IV)

where all the symbols are as defined earlier; and X is halogen, preferably chloro, bromo or iodo.

5. (Withdrawn) A process for the preparation of compound of formula (I) wherein A is -CH<sub>2</sub>- which comprises chemically or catalytically reducing compounds wherein A = CO, wherein all the symbols are as defined above.

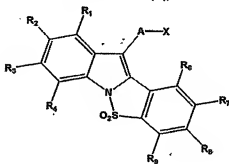


6. (Withdrawn) A process according to Claim-6 or Claim 7, comprising of carrying out one or more of the following optional steps: i) removing any protecting group; ii) resolving the racemic mixture into pure enantiomers by the known methods and iii) preparing a pharmaceutically acceptable salt of a compound of formula (I) and/or iv) preparing a pharmaceutically acceptable a prodrug thereof.

7. (Curently Amended) A pharmaceutical composition comprising either of a pharmaceutically acceptable carrier, diluent, excipients or solvate along with a therapeutically effective amount of a compound according to Claim-1, its stereoisomers, its radioisotopes, its N-oxides, ~~its polymorphs, its pharmaceutically acceptable salts, its pharmaceutically acceptable solvates, its useful bio-active metabolites~~ and any suitable combination of the above.

8. (Original) A pharmaceutical composition according to Claim-3, in the form of a tablet, capsule, powder, syrup, injectable, solution or suspension.

9. (Withdrawn) Novel intermediates defined by general formula (III),



(III)

wherein A may be either  $-CR_{11}R_{12}$ ,  $-C=O$  or  $-SO_2$ ;

X is a either of a hydrogen, a leaving group such as hydroxy, mesyl, tosyl or a halogeno, for example a chloro, bromo or iodo;

$R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$ ,  $R_9$ ,  $R_{11}$  and  $R_{12}$  may be same or different and each independently represent hydrogen, halogen, oxo, thio, perhaloalkyl, perhaloalkoxy, hydroxy, amino, nitro, cyano, formyl, amidino, guanidino, substituted or unsubstituted groups selected from linear or branched  $(C_1-C_{12})$ alkyl,  $(C_2-C_{12})$ alkenyl,  $(C_2-C_{12})$ alkynyl,  $(C_3-C_7)$ cycloalkyl,  $(C_3-C_7)$ cycloalkenyl, bicycloalkyl, bicycloalkenyl,  $(C_1-C_{12})$ alkoxy, cyclo $(C_3-C_7)$ alkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heterocyclylalkyl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, heterocyclylalkyloxy, acyl, acyloxy, acylamino, monoalkylamino, dialkylamino,

arylamino, diarylamino, aralkylamino, alkoxycarbonyl, aryloxy carbonyl, aralkoxycarbonyl, heterocyclylalkoxycarbonyl, heteroaryloxy carbonyl, hydroxyalkyl, aminoalkyl, monoalkylaminoalkyl, dialkylaminoalkyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxy carbonylamino, aralkoxy carbonylamino, aminocarbonylamino, alkylaminocarbonylamino, dialkylaminocarbonylamino, alkylamidino, alkylguanidino, dialkylguanidino, hydrazino, hydroxylamino, carboxylic acid and its derivatives, sulfonic acids and its derivatives, phosphoric acid and its derivatives; or

the adjacent groups like  $R_1$  and  $R_2$  or  $R_2$  and  $R_3$  or  $R_3$  and  $R_4$  or  $R_5$  and  $R_7$  or  $R_7$  and  $R_8$  or  $R_8$  and  $R_9$  together with carbon atoms to which they are attached may form a five or a six membered ring, optionally containing one or more double bonds and optionally containing one or more heteroatoms selected from "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and combinations of double bond and heteroatoms; or

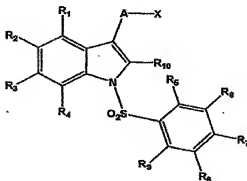
optionally  $R_{11}$  and  $R_{12}$  together With the carbon atoms to which they are attached may form a three to six membered ring, optionally containing one or more double bonds and optionally containing one or more heteroatoms selected from "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and combinations of double bond and heteroatoms; or

optionally either  $R_{11}$  or  $R_{12}$  are such substituents which may allow formation of bond with either  $R_{16}$  or  $R_{17}$  to form a 5, 6 or 7-membered heterocyclic ring;

and its stereoisomers and its salts.

10. (Withdrawn) A process provided for the preparation of novel intermediate of the general formula (III), according to any one of the routes which comprises of,

Route 1: cyclizing a compound of formula (V) given below,

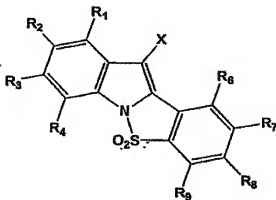


(V)

wherein X, A,  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_6$ ,  $R_7$ ,  $R_8$  and  $R_9$  are as defined earlier; and either of  $R_{10}$  or  $R_5$  is a halogeno, for example a chloro, bromo or iodo and the like while other is hydrogen; using a

Pd(0) or Pd (II) derivative as a catalyst, for example tetrakis triphenylphosphine palladium, (Bis-tri-o-tolylphosphine) palladium; and

Route 2: compounds of general formula (III) wherein A is SO<sub>2</sub> may be prepared by converting a compound of formula (VII) given below,



(VII)

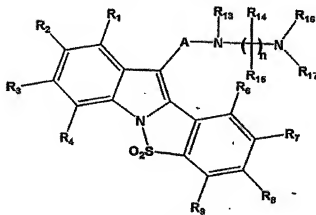
wherein X, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub> and R<sub>9</sub> are as defined in relation to formula (III); by metallation and followed by reaction with SO<sub>2</sub> gas and N-chlorosuccinimide.

11. (Withdrawn) Use of the compounds as claimed in Claim-1, in combination with other pharmaceutical agents, such as apo-B/MTP inhibitors, MCR-4 agonists, CCK-A agonists, monoamine reuptake inhibitors, sympathomimetic agents, adrenergic receptor agonists, dopamine agonists, melanocyte-stimulating hormone receptor analogs, cannabinoid 1 receptor antagonists, melanin concentrating hormone antagonists, leptins, leptin analogs, leptin receptor agonists, galanin antagonists, lipase inhibitors, bombesin agonists, neuropeptide-Y antagonists, thyromimetic agents, dehydroepiandrosterone or analogs thereof, glucocorticoid receptor agonists or antagonists, orexin receptor antagonists, urocortin binding protein antagonists, glucagon-like peptide-1 receptor agonists, ciliary neurotrophic factors, AGRPs (human agouti-related proteins), ghrelin receptor antagonists, histamine 3 receptor antagonists or reverse agonists, neuromedin U receptor agonists, in a therapeutically effective amount via a suitable pharmaceutical composition, to achieve the desired effect in mammals as well as humans.

12. (Withdrawn) Use of compound of general formula (I), as defined in Claim-1 or a pharmaceutical composition as defined in Claim-3 for preparing the medicaments.

13. (Withdrawn) Use of a compound as claimed in Claim-1 for the treatment and/or prevention of clinical conditions such as anxiety, depression, convulsive disorders, obsessive-compulsive disorders, migraine headache, cognitive memory disorders, ADHD (Attention Deficient Disorder/Hyperactivity Syndrome), personality disorders, psychosis, paraphrenia, psychotic depression, mania, schizophrenia, schizophreniform disorders, withdrawal from drug abuse, panic attacks, chronobiological abnormalities, circadian rhythms, anxiolytic, osteoporosis, ischemic stroke, lower the risk of SIDS in young infants with low endogenous melatonin levels, reproduction, glaucoma, sleep disorders and also disorders associated with spinal trauma and/or head injury.

14. (Withdrawn) Use of a compound as claimed in Claim-4 of the Formula (I).



Formula (I)

wherein A may be either  $-CR_{11}R_{12}$ ,  $-C=O$  or  $-SO_2$ ;

$R_1, R_2, R_3, R_4, R_6, R_7, R_8$  and  $R_9, R_{11}, R_{12}, R_{13}, R_{14}$  and  $R_{15}$  may be same or different and each independently represent hydrogen, halogen, oxo, thio, perhaloalkyl, perhaloalkoxy, hydroxy, amino, nitro, cyano, formyl, amidino, guanidino, substituted or unsubstituted groups selected from linear or branched  $(C_1-C_{12})$ alkyl,  $(C_2-C_{12})$ alkenyl,  $(C_2-C_{12})$ alkynyl,  $(C_3-C_7)$ cycloalkyl,  $(C_3-C_7)$ cycloalkenyl, bicycloalkyl, bicycloalkenyl,  $(C_1-C_{12})$ alkoxy, cyclo $(C_3-C_7)$ alkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heterocyclalkyl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, heterocyclalkyloxy, acyl, acyloxy, acylamino, monoalkylamino, dialkylamino, arylamino, diarylamino, aralkylamino, alkoxycarbonyl, aryloxy carbonyl, aralkoxycarbonyl, heterocyclalkoxycarbonyl, heteroaryloxy carbonyl, hydroxyalkyl, aminoalkyl, monoalkylaminoalkyl, dialkylaminoalkyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxy carbonylamino, aralkyloxy carbonylamino, aminocarbonylamino, alkylaminocarbonylamino,

dialkylaminocarbonylamino, alkylamidino, alkylguanidino, dialkylguanidino, hydrazino, hydroxylamino, carboxylic acid and its derivatives, sulfonic acids and its derivatives, phosphoric acid and its derivatives; or

the adjacent groups like R<sub>1</sub> and R<sub>2</sub> or R<sub>2</sub> and R<sub>3</sub> or R<sub>3</sub> and R<sub>4</sub> or R<sub>6</sub> and R<sub>7</sub> or R<sub>7</sub> and R<sub>8</sub> or R<sub>8</sub> and R<sub>9</sub> together with carbon atoms to which they are attached may form a five or a six membered ring, optionally containing one or more double bonds and optionally containing one or more heteroatoms selected from "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and combinations of double bond and heteroatoms; or

optionally R<sub>11</sub> and R<sub>12</sub> together with the carbon atoms to which they are attached may form a three to six membered ring, optionally containing one or more double bonds and optionally containing one or more heteroatoms selected from "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and combinations of double bond and heteroatoms; or optionally either R<sub>11</sub> or R<sub>12</sub> with may form bond with either R<sub>16</sub> or R<sub>17</sub> to form a 5, 6 or 7-membered heterocyclic ring, which may be further substituted with R<sub>14</sub> and R<sub>15</sub>, and may have either one, two or three double bonds;

R<sub>13</sub>, R<sub>16</sub> and R<sub>17</sub> may be same or different and each independently represents Hydrogen, substituted or unsubstituted groups selected from linear or branched (C<sub>1</sub>-C<sub>12</sub>)alkyl, (C<sub>2</sub>-C<sub>12</sub>)alkenyl, (C<sub>2</sub>-C<sub>12</sub>)alkynyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkenyl, bicycloalkyl, bicycloalkenyl, aryl, aralkyl, heteroaryl, heterocyclylalkyl; optionally R<sub>13</sub> along with either R<sub>16</sub> or R<sub>17</sub> and the two nitrogen atoms may form a 5, 6 or 7-membered heterocyclic ring, which may be further substituted with R<sub>14</sub> and R<sub>15</sub>, and may have either one, two or three double bonds; and

"n" is an integer ranging from 1 to 4, wherein the carbon chains which "n" represents may be either linear or branched,

for the treatment of mild cognitive impairment and other neurodegenerative disorders like Alzheimer's disease, Parkinsonism and Huntington's chorea.

15. (Withdrawn) Use of a compound as claimed in Claim-1 for the treatment of certain GI (Gastrointestinal) disorders such as IBS (Irritable bowel syndrome) or chemotherapy induced emesis.

16. (Withdrawn) Use of a compound as claimed in Claim-1 to reduce morbidity and mortality associated with the excess weight.

17. (Withdrawn) Use of a radiolabelled compound as claimed in Claim-1, as a diagnostic tool for modulating 5-HT and/or Melatonin receptor function.